

REMARKS

The applicant has carefully considered the Office action dated June 3, 2005 and the references it cites. By way of this Response, claims 2 and 4 have been amended and claim 1 has been cancelled without prejudice to its further prosecution. In view of the following, it is respectfully submitted that all pending claims are in condition for allowance and favorable reconsideration is respectfully requested.

As an initial matter, the applicant notes that a certified copy of the priority document is being submitted herewith to perfect the priority claim. Acknowledgement of the same is respectfully requested.

As a second preliminary matter, applicant notes that an information disclosure statement is being filed herewith to make the patents identified in the background section of the instant application formally of record.

Turning to the art rejections, the Office action rejected all pending claims as being unpatentable over Kwak et al., U.S. Patent 5,940,730 in view of Yoshiki et al., U.S. Patent 5,843,236, Mihara et al., U.S. Patent 5,681,780, and Lee, U.S. Patent 5,998,870. The applicant respectfully traverses these rejections.

Independent claim 2 recites a method comprising, among other things, etching the metal insulation film or the interlayer insulation film using a plasma having spiral movement such that a top edge of the contact hole or the via hole is rounded *simultaneously* as the contact hole or the via hole is formed. None of the cited art teaches or suggests such a method.

For example, Kwak et al., the primary reference relied upon in the Office action performs at least two distinct etching processes to form its hole

with a rounded edge (see Col. 2, lines 27-32). This is an important feature of the alleged Kwak invention as can be seen with reference to claim 1 of Kwak which recites isotropically etching, anisotropically etching and then plasma etching to form a hole with a rounded top edge. Since the law is quite clear that that, “[i]f the proposed modification or combination of the prior art would change the principle of operation of the prior art invention, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.” MPEP § 2143.01, citing, In re Ratti, 270 F.2d 810 (C.C.P.A. 1959), it is quite clear that Kwak cannot be modified to meet the recitations of claim 2 as such modification would change the principle of operation of the Kwak invention. Accordingly, it is respectfully submitted that claim 2 and all claims depending therefrom are allowable over Kwak, whether taken alone or in combination with the other cited art.

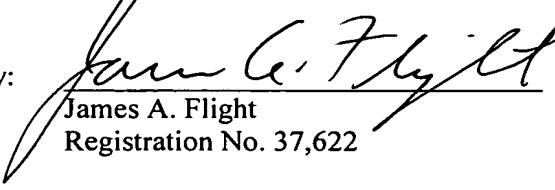
In view of the foregoing, it is respectfully submitted that claim 2 and all claims depending therefrom are allowable.

If the Examiner is of the opinion that a telephone conference would expedite the prosecution of this case, the Examiner is invited to contact the undersigned at the number identified below.

Respectfully submitted,

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